

## DRAFT Seedling Seminar Schedule

<http://connect.arc.nasa.gov/seedling>

### Wednesday February 19, 2014

<b>Materials Session</b>					
Time EST	Time PST	Title	Presenter	Affiliation	Phase
10:30–10:45	7:30–7:45	Session Welcome and Keynote	<b>Jim Heidmann</b>	GRC	
10:45–11:30	7:45–8:30	Graphene Based Ultra-Light Batteries for Aircraft	Carlos I. Calle	KSC	1
11:30–12:15	8:30–9:15	Novel Bonding Methodologies Toward the Attainment of Primary Bonded Aircraft Structure	John W. Connell	LaRC	2
12:15–13:00	9:15–10:00	BREAK			
13:00–13:45	10:00–10:45	Enhanced Dielectric-Barrier-Discharge Body-Force Generation using Nanofoam Materials	Emilie J. Siochi	LaRC	2
13:45–14:30	10:45–11:30	Deformation and Damage in Structurally Graded Nano-Crystalline Aluminum Alloys	Edward H. Glaessgen	LaRC	2

### Thursday February 20, 2014

<b>Materials Session Continued</b>					
Time EST	Time PST	Title	Presenter	Affiliation	Phase
10:30–10:45	7:30–7:45	Session Welcome	<b>Jim Heidmann</b>	GRC	
10:45–11:30	7:45–8:30	High Temperature Magnetic Material with Temperature Capability Greater Than 500 C	Jon Goldsby	GRC	1
11:30–12:15	8:30–9:15	Single Crystal High-Temperature Shape Memory Alloys	Glen S. Bigelow	GRC	2
12:15–13:00	9:15–10:00	BREAK			
13:00–13:45	10:00–10:45	Development of Engineered Ceramic Matrix Composites	Sai V. Raj	GRC	2
13:45–14:30	10:45–11:30	Aligned Boron Nitride Nanotube Forests for Thermal Management	Janet Hurst	GRC	1
14:30–15:15	11:30–12:15	BREAK			
15:15–16:00	12:15–13:00	Concept Demonstration of Dopant Selective Reactive Etching in Silicon Carbide	Robert Okojie	GRC	1
16:00–16:45	13:00–13:45	Design and Development of Aerogel-Based Antennas for Aerospace Applications	Mary Ann Meador	GRC	2

### Friday February 21, 2014

<b>Aerodynamics and Control</b>					
Time EST	Time PST	Title	Presenter	Affiliation	Phase
10:30–10:45	7:30–7:45	Session Welcome and Keynote	<b>Starr Ginn</b>	DFRC	
10:45–11:30	7:45–8:30	Compound Wing Long Endurance V/TOL	Michael Logan	LaRC	1
11:30–12:15	8:30–9:15	Artificial Intelligence Based Control Power Optimization on Tailless Aircraft	Frank H. Gern	LaRC	1
12:15–13:00	9:15–10:00	BREAK			
13:00–13:45	10:00–10:45	Real-Time Onboard Global Nonlinear Aerodynamic Modeling from Flight Data	Jay M. Brandon	LaRC	2
13:45–14:30	10:45–11:30	Controller Performance Evaluation of Fly-by-Feel Technology	Martin J. Brenner	DFRC	2
14:30–15:15	11:30–12:15	BREAK			
15:15–16:00	12:15–13:00	Physics-Based Stability and Control Derivative Measurement	Martin J. Brenner	DFRC	1
16:00–16:45	13:00–13:45	Flight validation of cruise efficient, low noise, extreme short takeoff and landing (CESTOL) and circulation control (CC) for drag reduction enabling technologies	Bruce Cogan	DFRC	1

## Tuesday February 25, 2014

<b>Aircraft Design</b>					
Time EST	Time PST	Title	Presenter	Affiliation	Phase
10:30–10:45	7:30–7:45	Session Welcome and Keynote	<b>Fay Collier</b>	LaRC	
10:45–11:30	7:45–8:30	Low Energy Nuclear Reaction Aircraft	Doug Wells	LaRC	1
11:30–12:15	8:30–9:15	Wing Shaping Concepts Using Distributed Propulsion Control For Achieving Optimal Spanwise L/D To Reduce Fuel Burn	Kevin W. Reynolds	ARC	1
12:15–13:00	9:15–10:00	Combined Electric Aircraft and Airspace Management Design for Metro-Regional Public Transportation	Larry A. Young	ARC	2
13:00–13:45	10:00–10:45	BREAK			
<b>Air Traffic</b>					
Time EST	Time PST	Title	Presenter	Affiliation	Phase
13:45–14:00	10:45–11:00	Session Welcome and Keynote	<b>Barry Sullivan</b>	ARC	
14:00–14:45	11:00–11:45	Transforming the NextGen Test Environment: Integrating Fused ADS-B Surveillance Data	Michelle Eshow (for Bimal L. Aponso)	ARC	1
14:45–15:30	11:45–12:30	Intelligent UAS Sense-and-Avoid utilizing Global Constraints	David E. Smith	ARC	1
15:30–16:15	12:30–13:15	BREAK			
16:15–17:00	13:15–14:00	Using Historical Data to Automatically Identify Air-Traffic Controller Behavior	Todd Lauderdale	ARC	1
17:00–17:45	14:00–14:45	Reducing the Environmental Impact of Aviation: A Data Mining Approach to Instantaneous Estimation of Fuel Consumption	Nikunj Oza	ARC	2

## Wednesday February 26, 2014

<b>Measurement Technology and Testing</b>					
Time EST	Time PST	Title	Presenter	Affiliation	Phase
10:30–10:45	7:30–7:45	Session Welcome and Keynote	<b>Michael Mastaler</b>	LaRC	
10:45–11:30	7:45–8:30	Investigation of the Magneto-Acoustic Villari Effect for Measuring the Internal Stress in Composites	Eric Madaras	LaRC	1
11:30–12:15	8:30–9:15	Coupling Damage-sensing Particles and Computational Micromechanics to enable the Digital Twin concept	Jacob D. Hochhalter	LaRC	1
12:15–13:00	9:15–10:00	BREAK			
13:00–13:45	10:00–10:45	Scintillating Quantum Dots for Imaging X-rays (SQDIX) for Aircraft Inspection	Eric Burke	LaRC	1
13:45–14:30	10:45–11:30	Luminescence-Based Temperature Mapping at Turbine Engine Temperatures Using Breakthrough Cr-Doped GdAlO <sub>3</sub>	Jeffrey I. Eldridge	GRC	2
14:30–15:15	11:30–12:15	BREAK			
15:15–16:00	12:15–13:00	Innovative, Low-cost Phased Microphone Array Design for Moderate-Scale Aeroacoustics tests	William Clifton Horne	ARC	1
16:00–16:45	13:00–13:45	Bio-mimetic Optical Sensor for Real-time Measurement of Aircraft Wing Deflection	Susan Frost	ARC	1
16:45–17:30	13:45–14:30	Fluorescence-Doped Particles for Simultaneous Temperature and Velocity Imaging	Paul M. Danehy	LaRC	2

## Thursday February 27, 2014

<b>Propulsion</b>					
Time EST	Time PST	Title	Presenter	Affiliation	Phase
13:00–13:15	10:00–10:15	Session Welcome and Keynote	<b>Rubén Del Rosario</b>	GRC	
13:15–14:00	10:15–11:00	Liquefied Bleed	John 'Dave' Saunders	GRC	1
14:00–14:45	11:00–11:45	Holistic concepts for Aeropropulsion	Vikram Shyam	GRC	1
14:45–15:30	11:45–12:30	Real-Time Closed-Loop Modulated Turbine Cooling	Vikram Shyam	GRC	1